TEST 3

Theme:

Science and Technology

READING

SHORT TEXT AND MCQs

Practice 1

Read the text carefully in each question. Choose the best answer **A**, **B** *or* **C**.

1 This invention is called "vision made audible". Who can use this device?
- **A** For those with visual impairment
- **B** Doctors
- **C** Eye Surgeons

Our Hair Is Our Crown

Call us to find out how you can have healthy hair. Take a treatment package with us and enjoy the beauty of your crown with the beauty of nature.

2 From the notice above, we know that
- **A** acne problems can be treated
- **B** hair problems can be treated
- **C** natural hair products are sold

Do you have sensitive skin?

Call us now and place your order @ 03 77899700 to get our hypoallergenic laundry detergent

3 What is special about the detergent?
- **A** Recommended for sensitive skin
- **B** It is made of florals and fruit
- **C** The cheapest in town

- Learning circuit knowledge
- Improve the ability to innovate
- Inspire imagination
- Fall in love with inventions

4 STEM DIY Science Experiment sets are sold. The objective is for
- **A** children to be innovative
- **B** children can buy at a discounted price
- **C** children can enrol for science tuition

SMK Sentul Is inviting students to take part in the Interschool Competition called **Young Scientists Fame.**

Students are to come up with an invention. Invention should be original.

Students are required to present their invention with detailed notes about the end product.

5 What is the purpose of the advertisement?
- **A** Meant for the scientists to take part
- **B** To promote new inventions
- **C** To promote the name of the school

Lab Assistant urgently required!

6 What is being advertised?
- **A** Job
- **B** Discounts
- **C** Event

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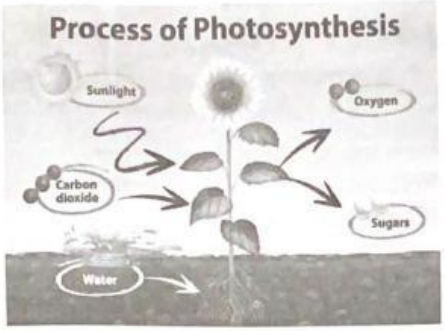

7 The above is
A process of plant growing
B photosynthesis process chart
C plant lifecycle

The importance of science in our day to day life can never be underestimated.

Enhancing students' interest in science and technology is essential.

8 From the message above, we can bring students, interest
A to organise science exhibitions in schools
B to attend extra science lessons
C to have a lab at home

[8 marks]

ERROR IDENTIFICATION

Practice 1

Read the text below and correct the underlined grammatical errors.
Write the correct word in the space provided for each question

PHOTOSYNTHESIS

Every living thing **(0)** **onto** earth needs food to survive and live a healthy life. Plants are also living things, so **(1)** them need food regularly. But instead of waiting for someone to feed them, they produce their own food. They produce their food **(2)** into a process called 'photosynthesis' and generate oxygen **(3)** from us. Plants need three things to make their food, **(4)** who are sunlight, water and carbon dioxide. These materials are crucial for plants, they get them **(5)** of nature. Sunlight from the sun and carbon dioxide from the atmosphere are available for free, but water **(6)** was available in the ground due to rain, rivers or human irrigation system. So, getting water is a little bit difficult when rivers are dry and precipitations **(7)** is very low. Photosynthesis is essential to all life on earth. It is the only biological process that captures energy from outer space (sunlight) and **(8)** converted it into chemical energy in the form of G3P (Glyceraldehyde 3-phosphate), which in turn can be made into sugars and other molecular compounds.

e.g. 0	on	3		6	
1		4		7	
2		5		8	

[8 marks]

LIVEWORKSHEETS

Practice 3

Read the text below and answer questions 1 to 8.

TECHNOLOGY AFFECTS RELATIONSHIPS

People are often caught in the push and pull of technological connectedness and the perceived deterioration of face-to-face interaction a result of the widespread use of smartphones. And yet, people of all ages are addicted to their phones. The truth is, the pull of technology doesn't always have the negative impact that people assume it does.

- Technology allows for the electricity that now powers our daily lives, personally and professionally.
- Technology created the telephone, the conference call, and video sharing software like Skype—empowering you to connect with family across the country or your top client across the globe.
- Technology brought us the Internet, which is the ultimate opportunity for human connection. It brings people together professionally, through social media (which can create real connections, believe it or not), and even empowers us to sustain relationships from huge physical distances.

In many cases, technology enhances relationships. It doesn't replace them. When used strategically, your business can use tools like chat on your website, your phone line, and video tutorials to enhance relationships with customers. It's still human. You just don't have to be in the same physical location.

Technology empowers meaningful conversations. Unless you have a bricks-and-mortar shop with a steady and strong following of local customers, you're using technology to communicate with your target audience. I'm willing to bet that even your favourite locally-owned coffee shop is using at least some form of technology to grow their business.

The trick is to be strategic. Every company connects with their customers differently, in different places. And every individual has different ways they like to interact with the businesses they support. Maybe you love email. Or maybe you'd rather Facebook message a company when you have a quick question. For others, chat on a business' website may be the right choice.

To effectively empower human interactions through technology, it's important that you understand your customers. You want to talk to them in the same place they're looking to talk to you.

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Complete the table below. Choose **no more than three words and/ or a number** *from the text above for each answer. Write your answer in the space provided.*

The reason for decrease in face-face interaction	1 _____
Technology powers our daily lives	2 _____
Technology created to empower connections	• telephone 3 _____ 4 _____
The ultimate opportunity brought by technology	5 _____
Businesses can access to tools such as websites, phones, video tutorials to	6 _____ with customers.
Empowers meaningful conversations by businesses	7 with _____
Companies connect with customers differently in	8 _____

[8 *marks*]

SHORT ANSWERS

Practice 1

Read the text below and answer questions 1 - 10.

A Vegetarian Meat

Obviously plants form the basis of most of our food, but scientists have recently created a burger that looks, smells, tastes and even cooks like meat even though it is entirely made from plant materials Doing this has meant solving a number of distinct challenges. For example, to behave like beef during cooking, the new burger has to contain vegetable fats that are solid at room temperature but melt when heated. The fat used in this case came from coconuts.

Plants don't have the proteins, haemoglobin and myoglobin that give red meat its colour and iron content. But some contain a very similar substance called leghemoglobin which, like haemoglobin and myoglobin, absorbs oxygen. This comes from plant species such as peas and beans which have root nodules containing bacteria that turn nitrogen from the air into fertiliser for the plant.

LIVEWORKSHEETS

Oxygen attacks this nitrogen-converting system so aggressively that some of its components can lose 99% of their capacitiy in less than six minutes. And so leghemoglobin is used to protect it by soaking up oxygen in the nodules. The nitrogen-fixing nodules are literally blood red inside because leghemolglobin is the same colour as haemoglobin.

Despite this, the leghemoglobin used to give the plant burger its appearance and iron content is actually not obtained from plants because this is too inefficient. Instead, it is produced by modified yeast grown in vats of blood-coloured liquid in scenes reminiscent of the TV series 'True Blood'.

Choose **no more than five words and/or a number** *from the text for each answer.*
For each question, write your answer in the space provided.

1 Scientists have created meat made completely from _____.

2 _____ are used as vegetable fats to behave like beef.

3 Proteins, haemoglobin and myoglobin give red meat

_____.

4 Leghemoglobin, a similar substance like haemoglobin and myoglobin, absorbs

_____.

5 When oxygen attacks the nitrogen-converting system, it loses their capacity

_____.

6 Leghemoglobin has _____ as haemoglobin.

7 The appearance and iron content of a plant burger is not taken from plants because

_____.

8 Modified yeast is grown in vats of _____.

Question 9 and 10.
Complete the table below with a word from the text.
For each question, write your answer in the space provided.

Meaning	Word
resolve	9 _____
similar to	10 _____

[10 *marks*]

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MATCHING GAPPED TEXT

Practice 1

You are going to read about technology addiction is a real threat. Six sentences have been removed from the passage. Choose from the sentences **(A – H)** *to fit each gap* **(1 – 6)**. *There are two extra sentences which you do not need to use. For each question, mark the correct answer* **(A – H)**.

TECHNOLOGY ADDICTION IS A REAL THREAT

As technology becomes more and more embedded in everyday life, the possible effects have begun to show themselves. **1** _____ Many teenagers find it easier to communicate through texting rather than calling or face-to-face talks. **2** _____ This behaviour isn't new in wilderness programmes for youth. The implications of this type of behaviour is obvious, but it's not the worst of it.

Now, we're not painting all technology to be harmful, it's just the unhealthy relationships that individuals form with the technology that is harmful. Technology, when used properly, has the power to enhance learning, communication, family bonding and more. **3** _____

In wilderness programmes for youth, we're no stranger to technology addiction. **4** _____ When repetitive behaviours set off the reward area of the brain, there's a chance of that behaviour becoming addictive–this is what happens with technology.

Think about it. **5** _____ Social media is often about gaining approval through "likes" and "tweets" for adolescents. Technology is just another platform for behavioural addiction and that makes it a real threat.

6 _____ If you haven't, usually it involves a young person obsessively playing video games for days on end without eating, drinking or sleeping, and eventually dying from exhaustion, dehydration or starvation. Another threat is texting and driving. This could definitely be considered a form of technology addiction. When an individual is putting themselves in fatal danger in order to answer a text or "like" a post, there's a serious issue.

A	When used improperly, it can lead to obsessive behaviours and technology addiction.
B	Even when teens are physically together, it often seems like they're all apart because their eyes are glued to their screens.
C	This is the extreme of what could happen, but it's important to acknowledge it and use those cases as lessons to better educate youth on how to form healthy relationships with technology.
D	Video games are built around reward systems and keeping the gamer playing.
E	Though still under review by DSM-5 as a "real" condition, many professionals and researchers firmly believe that it's a real issue.
F	For example, it's not hard to believe that smartphones have the ability to hinder social interactions–possibly even messing with social development in young people.
G	You've probably heard of the "gaming deaths" that have happened all over Asia.
H	In wilderness programmes for youth, we try to stress this to our students and teach them how to use technology to their benefit.

[6 *marks*]

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